

Issue: January 2018



>>> **Ayrshire Astronomical Society Newsletter**

Inside this Issue:

Meeting	Cover
President's Word	Page 2
News and Events	Page 3
Alex's Space	Page 4
AAS Library	Page 5

Moon Phases January/February 18

17th New Moon
24th First quarter
31st Full moon
7th Feb Last quarter

Next Meeting:

22nd January 2018

7pm

At the Prestwick Academy

The Music of the Universe

How gravitational waves are giving us new perspectives on the Universe

Daniel Williams



Photo by Marc Charron. Moon 37%, 10th January

President's Word

Well, here we are in 2108 (*note from the editor: the President's New Year's party must have been epic!*) and it has even started with a couple of decent clear nights. As a result, in the euphoria of Christmas and New Year, I actually went out into the observatory in decidedly negative temperatures. Amazingly it was all still there, and it worked. The bad news was that the instrument pod was soaked again on the inside and the top of the dome inside was decidedly wet – not good! I decided that the dome was as a result of the absolutely torrential rain blowing in under the slot cover, not too bad as it is not a leak as such. The instrument pod is another story, as I thought that had been cured last year. I did a couple of hours just sky touring around and then went indoors to get warm.

The following day, in daylight, such as it was, I confirmed my diagnosis regarding the water ingress, and added some of the new red and white LED light strips to replace the so called waterproof ones that had succumbed to the Scottish weather over the last year or so. Hopefully the new ones will last a bit longer.

That night it was good again so, in the company of John Sharp, I had another go. It all went well until the power plug on the mount lost contact due to the movement of the wiring as the mount swung around. That of course loses all your hard won settings. Still, we got it re aligned quickly and carried on for it to happen again! After the third time, and it was getting cold, we decided to pack in and sort out a better fix in daylight. Still it was a worthwhile session despite the power issue and some drifting, very high cloud.

So, lots to do in terms of repairs and fixes, but nothing serious, all part of trying to do astronomy in Scotland and probably anywhere else.

Oh yes! I also got a nice heavy -duty ball head mount to go on my barn door mount – something else I need to practice with.

Happy New Year everyone and see you at the meeting.

Super Moon - Blue Moon

On the 2nd of January the Full Moon was near the perigee, that is, the point in its elliptical orbit when it is nearest to the Earth. The Moon at this point appears larger than normal especially when low in the sky and it also appears to move across the sky some 6% faster than when it is at its furthest from the Earth – at apogee. Seen close to the horizon the Moon appears HUGE and this type of Moon is often called a Super Moon.

This month on the 31st we get a second full moon also, technically, a Super Moon, but, because it is the second full Moon of the month, it has come to be known as a Blue Moon. Originally, however this term; Blue Moon; referred to the third full Moon in an astronomical season with four of them. If you missed the January sightings for any reason, then they occur again in March on the 2nd and 31st, although they will not be Super Moons.

Whilst the Super Moon makes a stunning naked eye or wide field photographic object, it is not so good for telescopic viewing due to the distinct lack of shadows.



News and Events

Celestial Events for 2018

Lunar Eclipse visible from UK:
Meteor Showers

27th July

22nd/23rd April Lyrids Meteor Showers

6th/7th May Eta Aquarids (fainter in the Northern Hemisphere)

28th/29th July Delta Aquarids Showers (Full moon will be an issue)

12th/13th August Perseids Meteor Showers

8th October Draconids Meteor Shower (minor shower but no moon to spoil it)

21st/22nd October Orionids Meteor Shower

5th/6th November Taurids Meteor Shower (long-running but minor meteor shower)

17th/18th November Leonids Meteor Shower

13th/14th December Geminids Meteor Shower

Jupiter at Opposition

Saturn at Opposition

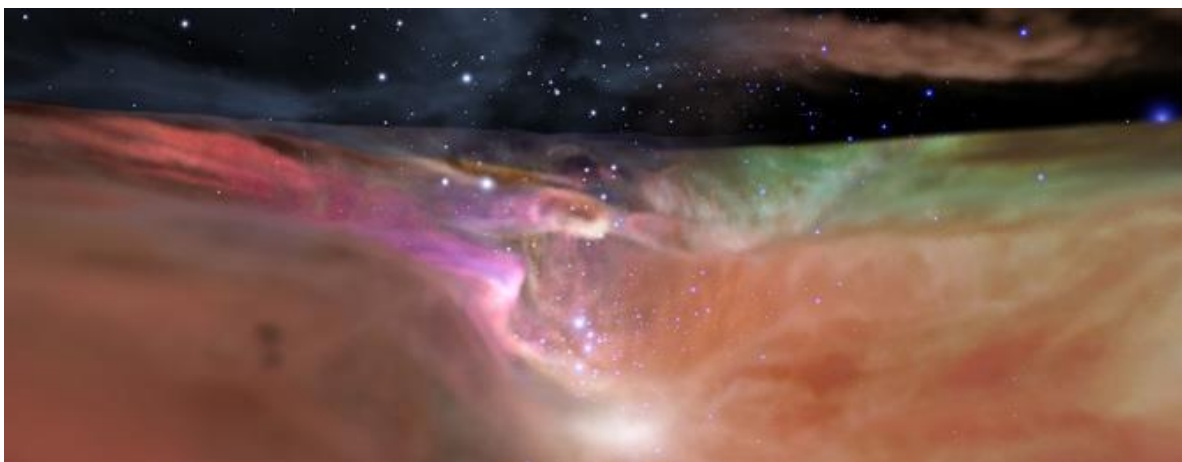
Uranus at Opposition

9th May Jupiter will be at its closest approach to Earth. The moon is at the last quarter.

27th June (nearly full moon and summer time....)

23rd October

NASA Space Telescopes Provide a 3D Journey through the Orion Nebula



Unprecedented Fly-through Combines the Visible and Infrared Vision of the Hubble and Spitzer Space Telescopes

By combining the visible and infrared capabilities of the Hubble and Spitzer space telescopes, astronomers and visualization specialists from NASA's Universe of Learning program have created a spectacular, three-dimensional, fly-through movie of the magnificent Orion nebula, a nearby stellar nursery. Using actual scientific data along with Hollywood techniques, a team at the Space Telescope Science Institute in Baltimore, Maryland, and the Caltech/IPAC in Pasadena, California, has produced the best and most detailed multi-wavelength visualization yet of the Orion nebula. The three-minute movie allows viewers to glide through the picturesque star-forming region and experience the universe in an exciting new way.

The link to the video is here:

<http://hubblesite.org/videos/news/release/2018-04>

Alex's Space

Did they ...or Did They Not???

I heard an interesting programme on BBC World Service (RADIO), I think the name of the programme as "Book Shelf", but I am not certain. Anyway, one of the books discussed was called "NASA Mooned America". It was published at the authors own expense as no publisher was interested, one wonders why? The authors name is Ralph Rene, a self-taught engineer. In his book he maintains that Neil Armstrong did not step onto the real Moon, and it was all a gigantic conspiracy to save J.F.K who committed America: "that before this decade is out America will land a man on the Moon and return him safely to Earth", not realising that America was far from ready for such a technical enterprise. He lists the usual reasons why it was faked in some secret location in the desert and in a studio.

A senior NASA space engineer who read the book called Rene's conspiracy theory; "a load oftrash", not his exact description, but this is a family newsletter. This engineer maintains that at least 2500 people worldwide would have to be involved in it. Most of us have experience of keeping a secret, in a family or at work, and there is always a maximum number of people who can be told the secret safely if it is to remain one. The bigger and more sensational the secret, the smaller this number must be.....only 9 people were allowed to know in advance the date and place of the D Day landing in France in 1944. But! Hold on! Could the conspiracy theory actually be true? The answer is definitely not! The definitive proof lies in the fact that the Moon rocks returned to Earth were made of non-terrestrial basalt, as the hundreds of geologist who examined them can testify. There is no way that they could be faked. Had they been taken from a meteorite, they would have shown signs of oxidation. Only rocks that have lain for billions of years in a vacuum could have such characteristics.

So there you have it! What do you think? Did they or Did they Not? That is the question.

Oh! Yes! And remember fellow Stargazers; the AAS Library is open 24/7 and is full of good reading material..... after all, reading gives you somewhere to go when you have to stay where you are.

Back next Month

Alex Baillie

AAS Library

Open for business!

THE LIBRARY IS A RESOURCE FOR MEMBERS -PLEASE SUPPORT IT AND MAKE USE OF IT

The Library list is also available on the website under "links" and can be downloaded



The library is now full up - if you would like to obtain a list or borrow an item

– contact Alex at the next meeting or give him a call on 01563 520887.

Unfortunately Alex does not have email, however messages via library@ayraastro.com will reach him the old fashioned way after a short delay but please contact him directly if at all possible.

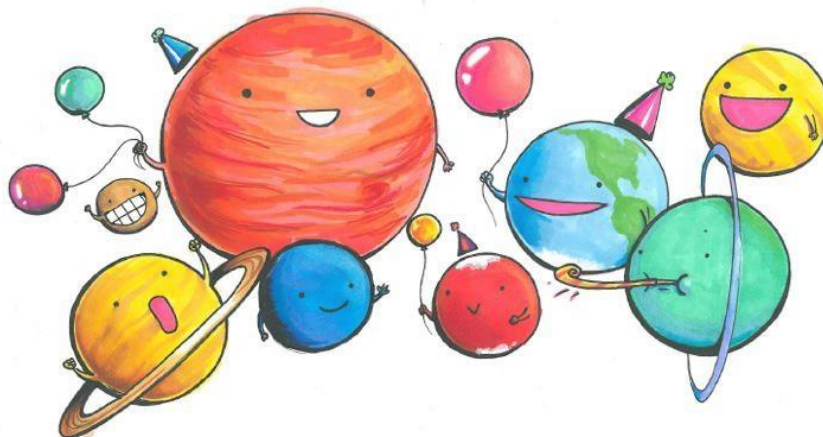
THE LIBRARY IS WAITING FOR YOUR CALL!! There are a lot of interesting items to borrow

Miscellaneous

If you would like to publish an article or photos you have taken and wish to share, please email me isagrogg@hotmail.com

Isabelle

HOW DO YOU ORGANIZE
A SPACE PARTY ?



YOU PLANET.